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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,814	12/27/2005	Nobuhisa Miyake	1806.1011	6487

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
BOYKIN, TERRESSA M	
ART UNIT	**PAPER NUMBER**
1796	

MAIL DATE	DELIVERY MODE
12/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/562,814	MIYAKE ET AL.	
	Examiner	Art Unit	
	Terressa M. Boykin	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3-27-6*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

*** Note that all responses to this action should be sent to Art Unit 1796.**

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1- 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 5-331108 see abstract, claims; and JP 5-331108 in view of 3274214.

JP 5-331108 discloses an aliphatic aromatic carbonate, a diaromatic carbonate or their mixture by ester interchange reaction of an aromatic hydroxyl compound and an

aliphatic carbonate or an aliphatic aromatic carbonate, the improvement is that at least one of Y or Tl compounds used as catalyst.

The transesterification of an aromatic hydroxy compound with a dialiphatic carbonic acid ester or an aliphatic aromatic carbonic acid ester is carried out in the presence of at least one selected from an yttrium compound and a thallium compound as a catalyst to produce the objective aromatic carboxylic acid ester. This aromatic carbonic acid ester can be obtained with higher activity at a higher rate of reaction in higher yield than those of a conventional method. Specifically, the process is directed to a method for producing a carbonic acid ester by transesterification of an aromatic hydroxy compound with a dialiphatic carbonic acid ester or an aliphatic aromatic carbonic acid ester.

With regard to applicants claims 12 and13 the preferred catalyst includes yttrium alkoxides, phenoxide, chloride, acetate and acetylacetonate and thallium acetylacetonate, oxide and acetate. The aromatic hydroxy compound is phenol and the dialiphatic carbonate is dimethyl carbonate.

The carbonate may be used e.g. in production of polycarbonates such as polycarbonate isocyanates etc..

In an example, a mixture of 42.35g phenol, 13.51g dimethyl carbonate and 0.15g yttrium isopropoxide was heated from 145-165 deg.C in 3 hrs. under stirring with distribution of methanol to give reaction solution containing 6.02g methyl phenyl carbonate and 0.80g diphenyl carbonate.

With regard to claims 14 -17, the methods of separation via distillation, extraction and filtration are neither novel nor unobvious. Further, the production of film from polycarbonate is also neither novel nor unobvious.

The reference discloses an aromatic carbonate prepared from the same components as claimed by applicants except for the particular temperatures

and/or parameters, i.e. temperature ranges as claimed . It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ particular temperature ranges or parameters (i.e. hydroxy content, amounts in ppm) as known in the art, since it is well-established that merely selecting proportions and ranges is not patentable absent a showing of criticality, as in claims 28-29. In re Becket, 33 U.S.P.Q. 33 (C.C.P.A. 1937). In re Russell, 439 F.2d 1228, 169 U.S.P.Q. 426 (C.C.P.A. 1971). Note claims 32-37. With regard to claim 17, likewise, the removal of water is a common practice in the art including that by membrane separation. See 3274214.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 37 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 5-331108 see abstract and applicants on I.D.S. filed 10-27-06.

JP 5-331108 discloses an aliphatic aromatic carbonate, a diaromatic carbonate or their mixture by ester interchange reaction of an aromatic hydroxyl compound and an aliphatic carbonate or an aliphatic aromatic carbonate, the improvement is that at least one of Y or Tl compounds used as catalyst.

The transesterification of an aromatic hydroxy compound with a dialiphatic carbonic acid ester or an aliphatic aromatic carbonic acid ester is carried out in the presence of at least one selected from an yttrium compound and a thallium compound as a catalyst to produce the objective aromatic carboxylic acid ester. This aromatic carbonic acid ester can be obtained with higher activity at a higher rate of reaction in higher yield than those of a conventional method. Specifically, the process is directed to a method for producing a carbonic acid ester by transesterification of an aromatic hydroxy compound with a dialiphatic carbonic acid ester or an aliphatic aromatic carbonic acid ester.

With regard to applicants claims 12 and 13 the preferred catalyst includes yttrium alkoxides, phenoxide, chloride, acetate and acetylacetonate and thallium acetylacetonate, oxide and acetate. The aromatic hydroxy compound is phenol and the dialiphatic carbonate is dimethyl carbonate.

The carbonate may be used e.g. in production of polycarbonates such as polycarbonate isocyanates etc..

In an example, a mixture of 42.35g phenol, 13.51g dimethyl carbonate and 0.15g yttrium isopropoxide was heated from 145-165 deg.C in 3 hrs. under stirring with distribution of methanol to give reaction solution containing6.02g methyl phenyl carbonate and 0.80g diphenyl carbonate.

With regard to claims 14 -17, the methods of separation via distillation, extraction and filtration are neither novel nor unobvious. Further, the production of film from

polycarbonate is also neither novel nor unobvious. With regard to claim 17, likewise, the removal of water is a common practice in the art including that by membrane separation. Note also claims 32-37. *For example purposes only* note USP 3274214.

The reference discloses an aliphatic aromatic carbonate prepared from the same components as claimed by applicants. Any properties or characteristics inherent in the prior art, e.g. recycled or recyclable, although unobserved or detected by the reference, would still anticipate the claimed invention. Note In re Swinehart, 169 USPQ 226. "It is elementary that the mere recitation of a newly discovered...property, inherently possessed by things in the prior art, does not cause claim drawn to those things to distinguish over the prior art". Since the disclosed parameters, hydroxy content or temperature ranges, amounts in ppm, are expressed differently and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that they are in fact different and whether such difference is unobvious. In view of the above, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terressa M. Boykin whose telephone number is 571

272-1069. The examiner can normally be reached on Monday-Thursday 10-5:30 Friday (work at home).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Terressa M. Boykin
Primary Examiner
Art Unit 1796

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